
Additions to Flora Mesoamericana: A New Species of *Dioscorea* (Dioscoreaceae) from Panama

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ABSTRACT. *Dioscorea davidsei*, a new species from Panama, is described and illustrated, and its relationships are discussed. The new species is distinguished from *D. megalantha*, *D. furcata*, *D. hieronymi*, and *D. sellowiana*, sect. *Cycladenium* from South America, by its sessile and conspicuously open and patent perianth.

As part of the monographic study of the genus *Dioscorea* L. for southeastern Mexico and Central America finished in 1994 (Téllez & Schubert, 1994), several species were not included because material of both sexes was lacking. Attempts to obtain both male and female collections during fieldwork in Panama were not successful. Consequently, even though the material is still not complete I decided to publish this species.

Dioscorea davidsei O. Téllez, sp. nov. TYPE: Panama. Comarca de San Blas: Cerro Brewster, headwaters of Río Cangandí, 09°18'N, 79°16'W, elev. 2600 ft., tropical wet forest, 24 Apr. 1985, G. de Nevers, H. Herrera, B. Hammel & S. Charnley 5486 (holotype, MO; isotypes, MEXU, PMA not seen). Figure 1.

Caules dextrorsum volubiles. Folia 6.5–11.0 cm longa, 3.0–6.6 cm lata, 7-nervata. Inflorescentiae staminatae spicatae 9.0–18.0 cm usque longae. Flores rubri, sessiles; stamina 3, centralia, saepe disco carnosae inserta; antherae antrorsae, distinctae; pistillodia nulla. Inflorescentiae pistillatae ignota.

Dextrorse, climbing stems, lineate to sulcate. Leaves 6.5–11.0 cm long, 3.0–6.6 cm wide, alternate, ovate to ovate-lanceolate, 7-nerved, semichartaceous, the base cordate, the apex abruptly acuminate; petioles 1.0–3.0 cm long, slightly angulate, glandular-like. Staminate inflorescences 1–2 spikes 9.0–18.0 cm long, axilar; rachis angulate, sulcate, dentate-serrulate; external bract ca. 2.0 mm long, ca. 0.5 mm wide, linear-lanceolate to lanceolate; internal bract ca. 1 mm long, ca. 0.5 mm wide, lanceolate. Flowers 1 per bud, sessile; perianth ca. 2.5 mm, maroon; tepals 2.0–2.5 mm long, 1.0–1.5 mm wide, ovate, oval to triangular, patent; stamens 3, sessile, the anthers antrorse, the thecae coherent, inserted in a flat, transversally

oblong to subquadrate carnosity, located in the center of the receptacle and joined to a circular and central fleshy disc; pistillode lacking. Pistillate inflorescences unknown.

Distribution. *Dioscorea davidsei* is endemic to the southernmost portion of Mesoamerica in Panama. It occurs in tropical rainforest, at an altitude of ca. 2600 m. Flowering occurs in April.

Dioscorea davidsei probably belongs to section *Cycladenium* Uline, subgenus *Helmia* (Kunth) Benth., by virtue of its three stamens, all joined in a fleshy disc; however, the lack of seeds makes it impossible to establish its subgeneric placement with certainty. *Dioscorea davidsei* seems to be related to *D. megalantha* Grisebach, *D. furcata* Grisebach, *D. hieronymi* Knuth, and *D. sellowiana* Uline ex Knuth, but can be distinguished from all other species in the section by the sessile flowers and the conspicuously open and patent perianth.

Dioscorea davidsei fits within the Mesoamerican species that have three stamens (Téllez & Schubert, 1994). It is characterized by its staminate flowers, sessile stamens that are inserted in a fleshy disc, and the ovate to ovate-triangular tepals. In contrast, *D. convolvulacea* Schlechtendal & Chamisso has pedicellate staminate flowers, stamens with long filaments, and oblong to lanceolate tepals. On the other hand, *D. davidsei* has simple spikes, while in *D. standleyi* C. Morton, *D. racemosa* (Klotzsch) Uline, and *D. lepida* C. Morton the inflorescences are racemes or panicles of cymes.

The specific epithet is dedicated to Gerrit Davidse, Missouri Botanical Garden, for financial and academic support, help, and friendship during several visits to MO.

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Literature Cited

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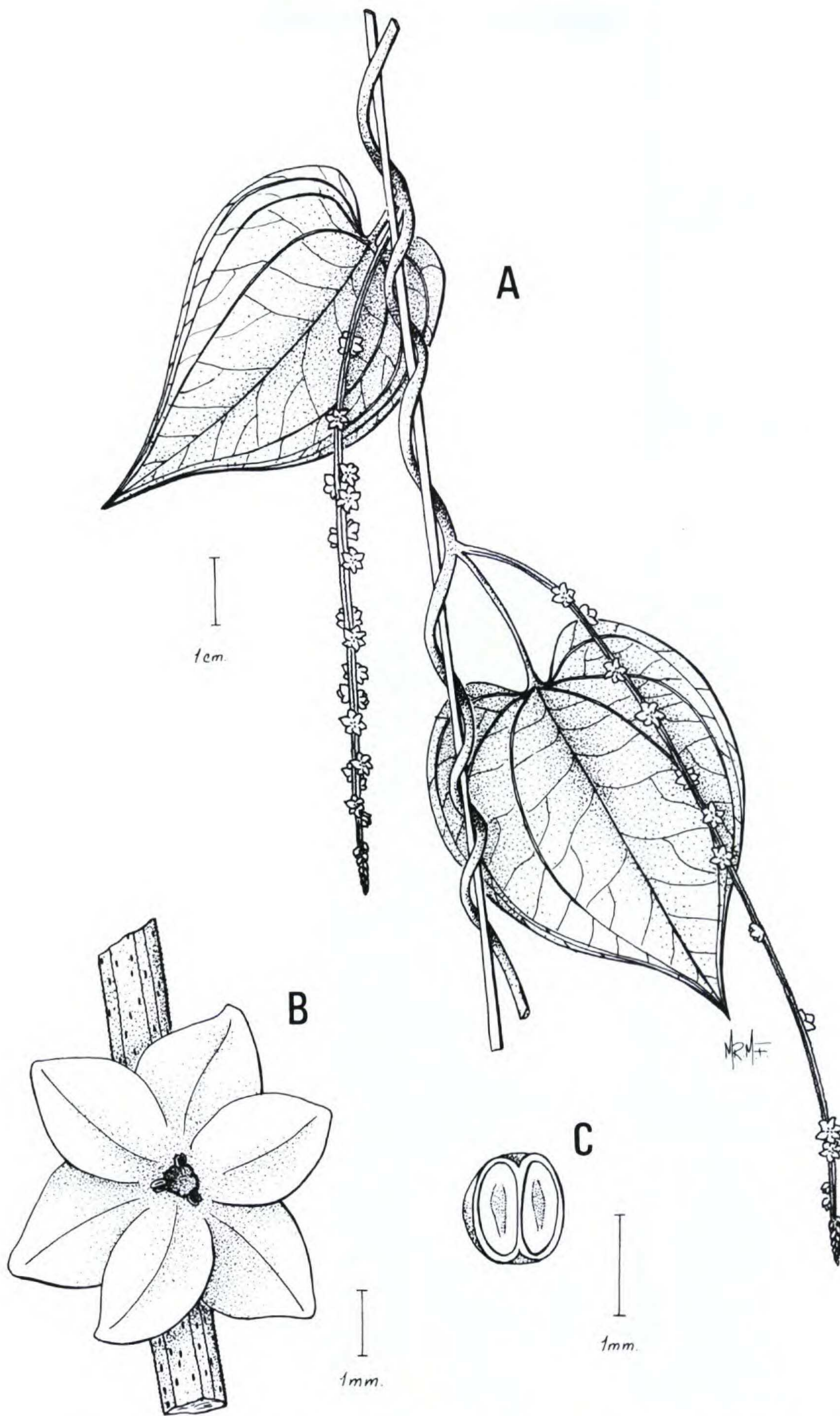


Figure 1. *Dioscorea davidsei* O. Téllez. —A. Staminate plant habit, showing the dextrorse stems and the staminate spikes. —B. Detail of staminate flower, showing the position of the stamens. —C. Detail of the anther. All from *G. de Nevers et al.* 5486.